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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/584,668

05/15/2007

Gerhard Fritz

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FISH & RICHARDSON PC
P.O. BOX 1022
MINNEAPOLIS, MN 55440-1022

EXAMINER

CHAN, EMILY Y

ART UNIT

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2829

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/584,668	Applicant(s) FRITZ ET AL.	
	Examiner EMILY Y. CHAN	Art Unit 2829	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 May 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/24/07; 6/27/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities:

Applicants are required to put section headings in the specification.

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Appropriate correction is required.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claim 1 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of co-pending Application No. 10/591031. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claim 1 of the instant application and the claim 1 of the co-pending Application No. 10/591031 are directed to the same energy meter device. The claimed components associated with their functions recited in the claim 1 of the instant application such as "a first input", "a second input", "a multiplier", "a phase evaluation block" and "a phase correction block" are recited in the claim 1 of co-pending Application No. 10/591031. Therefore, this double patenting rejection is indeed proper.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-2, 4 and 6-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Lester (DB 2319345).

With respect to the claim 1, Lester ('345) discloses an energy metering system (see Fig. 2) as claimed, comprising:

a first input (9) for feeding a signal derived from a voltage (v) to which is connected a first analogue-to-digital converter (12);

a second input (8) for feeding a signal that is derived from a current (I) to which is connected a second analogue-to-digital converter (14);

a multiplier (16) linking the outputs of the two analogue-to-digital converters (12,14) (see page 10, line 19);

a phase evaluation block (20) with two inputs, which are coupled (via 16 and 14 or 12) to the first and second inputs of the energy metering system for measuring a phase difference, and having an output, which is coupled to a phase correction unit (22, 24, 26, 28); and

the phase correction block (22, 24, 26, 28), which is coupled to an output of one of the two analogue-to digital converters (via 16, 18), designed for correcting the phase difference of the digitized signal derived from a current (I) or a voltage (V).

With respect to the claim 2, Lester ('345) discloses that phase evaluation unit (20) comprises means (memory) for permanently storing a phase correction value (see page 11, lines 1-4).

With respect to the claim 4, Lester ('345) discloses that his first and the second analog-to-digital converters (12, 14) are each in the form of sigma-delta converters.

With respect to the claim 6, Lester ('345) 's first and the second analog-to-digital converters (12,14), the phase correction block (22,24,26,28) and the phase evaluation block (20) are designed using integrated circuit technology.

With respect to the claims 7-8, Lester ('345) discloses that a nonconductively coupling transfer arrangement or a transformer (6) is connected to the first input (9) and/or to the second input (8) for the purpose of coupling-in the signal derived from a voltage (V) and/or from a current (I) .

Therefore, Lester ('345) anticipated the claimed invention.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lester ('345) as applied to claim 1 above, and further in view Mazzoni (US Patent No. 5,657,237).

Lester ('345) fails to disclose the limiting amplifier connected to the input of the phase evaluation block (20).

Mazzoni ('237) discloses an instrument for the digital electronic measurement of periodic electrical quantities (see Fig. 2) comprising a voltage input terminal (Vi), current

input terminals (li) and a phase evaluation block (4) . Mazzoni ('237) exclusively discloses operational amplifiers (2) connected to the voltage (vi) and (li) and the input of the phase evaluation block (4).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to incorporate the teaching of Mazzoni ('237) into Lester ('345)'s meter so that Lester ('345)'s meter comprises the limiting amplifier as claimed for the advantage of rendering all input values positive and thus allow the use of an analog digital converter as disclosed by Mazzoni ('237) (see Col. 4, lines 62-64).

5. Claims 5 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lester ('345) as applied to claim 1 above, and further in view Germer et al (US patent No. 5,017,860).

Lester ('345) fails to disclose an integrator recited in the claim 5, and means for generating a test signal recited in the claim 9.

Germer et al ('860) disclose an electrical meter (see Fig. 1) comprising a multiplier (65) and exclusively disclose an integrator (15) integrator connected downstream of multiplier (65) as recited in the claim 5 and a mean (1,2,3, 44,45,46) for generating a test signal (4,5,6, 51,52,53) which is coupled to the voltage and current inputs of the electronic meter (see col. 3, lines 9-49).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to incorporate the teaching of Germer et al ('860) into Lester ('345)'s meter so that Lester ('345)'s meter comprise the integrator and test

signal generating means as claimed because Germer et al ('860) disclose that their meter provides an accurate representation of energy consumption (see Abstract, last two lines).

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Burns et al (US patent No. 6,377,037) disclose a watt-hour meter (see Fig. 1) comprising first and second converter (16,18).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to EMILY Y. CHAN whose telephone number is (571)272-1956. The examiner can normally be reached on 8:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ha T Nguyen can be reached on 571-272-1678. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2829

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

EC
3/30/08

/Ha T. Nguyen/

Supervisory Patent Examiner, Art Unit 2829

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